

# Yulin Wang

Ph.D. Student, Tsinghua University

Research Interests: Efficient Deep Learning, Computer Vision.

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## Education

**Ph.D. Student in Pattern Recognition and Machine Learning, Tsinghua University, China.** 09/2019 – Now

➤ Advisor: Prof. Cheng Wu and Prof. Gao Huang.

**B.Eng. in Automation, Beihang University, China.**

09/2015 – 06/2019

➤ GPA: Top 1/231.

## Research Experience

**Intern, Berkeley Deep Drive, University of California Berkeley, USA.**

07/2018 – 08/2018

➤ Advisor: Dr. Ching-Yao Chan.

**Intern, Lab of Intelligent Manufacturing, Beihang University, China.**

06/2017 – 06/2018

➤ Advisor: Prof. Fei Tao.

## Publications

- [1] **Yulin Wang**, Rui Huang, Shiji Song, Zeyi Huang, Gao Huang.  
**Not All Images are Worth 16x16 Words: Dynamic Vision Transformers with Adaptive Sequence Length**  
*Neural Information Processing Systems (NeurIPS)*, 2021
- [2] Yizeng Han, Gao Huang, Shiji Song, Le Yang, Honghui Wang, **Yulin Wang**.  
**Dynamic Neural Networks: A Survey**  
*IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI, Q1, IF=16.39)*, 2021
- [3] **Yulin Wang**, Zhaoxi Chen, Haojun Jiang, Shiji Song, Yizeng Han, Gao Huang.  
**Adaptive Focus for Efficient Video Recognition**  
*IEEE/CVF International Conference on Computer Vision (ICCV Oral)*, 2021
- [4] **Yulin Wang**, Gao Huang, Shiji Song, Xuran Pan, Yitong Xia, Cheng Wu.  
**Regularizing Deep Networks with Semantic Data Augmentation**  
*IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI, Q1, IF=16.39)*, 2021
- [5] **Yulin Wang**, Zanlin Ni, Shiji Song, Le Yang, Gao Huang.  
**Revisiting Locally Supervised Learning: an Alternative to End-to-end Training**  
*International Conference on Learning Representations (ICLR)*, 2021
- [6] Shuang Li, Mixue Xie, Kaixiong Gong, Chi Harold Liu, **Yulin Wang**, Wei Li.  
**Transferable Semantic Augmentation for Domain Adaptation**  
*IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR Oral)*, 2021
- [7] Shuang Li, Kaixiong Gong, Chi Harold Liu, **Yulin Wang**, Feng Qiao, Xinjing Cheng.  
**MetaSAug: Meta Semantic Augmentation for Long-Tailed Visual Recognition**  
*IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)*, 2021
- [8] Le Yang, Haojun Jiang, Ruojin Cai, **Yulin Wang**, Shiji Song, Gao Huang, Qi Tian.  
**CondenseNet V2: Sparse Feature Reactivation for Deep Networks**  
*IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)*, 2021
- [9] **Yulin Wang**, Kangchen Lv, Rui Huang, Shiji Song, Le Yang, Gao Huang.  
**Glance and Focus: a Dynamic Approach to Reducing Spatial Redundancy in Image Classification**  
*Neural Information Processing Systems (NeurIPS)*, 2020

- [10] **Yulin Wang**, Shiji Song, Gao Huang, Cheng Wu.  
**Collaborative Learning with Corrupted Labels**  
*Neural Networks (NN, Q1, IF=8.05)*, 2020
- [11] **Yulin Wang**, Xuran Pan, Shiji Song, Hong Zhang, Cheng Wu, Gao Huang.  
**Implicit Semantic Data Augmentation for Deep Networks**  
*Neural Information Processing Systems (NeurIPS)*, 2019
- [12] **Yulin Wang**, Yongping Zhang, Fei Tao, Tingyu Chen, Ying Cheng, Shunkun Yang.  
**Logistics-aware Manufacturing Service Collaboration Optimization towards Industrial Internet Platforms**  
*International Journal of Production Research (IJPR, Q1, IF=8.57)*, 2019

## Preprints & In-submission Papers

- [1] **Yulin Wang**, Gao Huang, Zanlin Ni, Shiji Song.  
**On Locally Supervised Deep Learning**  
(submitted to **TPAMI**), 2021
- [2] **Yulin Wang**, Gao Huang, Jiayi Guo, Shiji Song, Cheng Wu.  
**Meta-Semi: A Meta-learning Approach for Semi-supervised Learning**  
*arXiv:2007.02394* (submitted to **TIP**), 2020

## Academic Service

- Reviewer for TPAMI, IJCV, T-Cybernetics, CVPR, ICCV, NeurIPS, ICLR, ...

## Selected Honors

- Outstanding Reviewer, CVPR, 2021
- Outstanding Oral Presentation, Doctoral Students Forum, Tsinghua University, 2021
- Travel Award, NeurIPS, 2019
- “Shen Yuan” Medal, Beihang University, 2018 (**Top 10/3500+**)
- National Scholarship, Ministry of Education of China, 2018 (**Top 2%**)
- National Scholarship, Ministry of Education of China, 2017 (**Top 2%**)
- Innovation Scholarship, Ministry of Industry and Information Technology of China, 2017 (**Top 1/231**)
- First Prize in the “Zhou Peiyuan” Mechanics Competition for Undergraduate Students, 2017 (**Top 0.3%**)
- First Prize in National Undergraduate Mathematical Contest in Modeling, 2017 (**Top 0.2%**)
- Scholarship for Outstanding Academic Performance, Beihang University, 2016-2019 (**Top 5%**)

## Invited Talks

- 2019.10, SCSE, Beihang University, Semantic Data Augmentation
- 2019.12, School of Computer Sci. and Tech., Beijing Institute of Technology, Semantic Data Augmentation
- 2020.06, Huawei Technologies Ltd., Glance and Focus Networks
- 2020.11, Qingyuan Seminar, Glance and Focus Networks
- 2021.03, ByteDance Ltd., Semantic Data Augmentation
- 2021.04, Doctoral Students Forum, Tsinghua University, Locally Supervised Deep Learning
- 2021.04, Beijing Academy of Artificial Intelligence, Dynamic Image/Video Recognition
- 2021.06, AI Time, Locally Supervised Deep Learning
- 2021.07, SIA, Chinese Academy of Science, Efficient Deep Learning
- 2021.09, Aibee (invited by Yuanqing Lin), Semantic Data Augmentation